Amendments to the Specification:

Please replace the paragraph beginning on page 6, line 4, with the following amended paragraph:

-- As shown in the drawings for purposes of illustration, the present invention relates to techniques for manufacturing a integrated circuit substrate using ceramic, glass or glass-coated ceramic, hollow microspheres to create a substrate is having low thermal conductivity, low dielectric constant, low electrical conductivity, light weight and high strength. --

Please replace the paragraph beginning on page 6, line 21, with the following amended paragraph:

-- FIG. 2 shows microspheres 10 in a slurry matrix 40 composed of an appropriate vehicle for the desired substrate applications. For example, slurry matrix 40 may be composed of glass particles; binders, such as ethyl <u>cellulose</u> celluose, acrylics, polyvinyl alcohols, organic polymers; solvents, such as water, acetone, polyglycols; viscosity modifiers, such as surfactants, organic thickeners or other fillers as required to accomplish the desired substrate characteristics for thermal conductivity, dielectric constant, mass, strength, cost of materials and manufacture, etc. --

Please replace the paragraph beginning on page 8, line 16, with the following amended paragraph:

-- FIG. 9 shows a cross-sectional view of glass-coated microspheres 100 in a dried or cured slurry matrix 150. As is readily apparent in FIG. 9, the glass-coated microspheres 100 have a random arrangement in the dried or cured slurry matrix 150. FIG. 10 is a flow chart of a possible method to manufacture a substrate according to FIGs. 7-9, in which glass-coated microspheres 100 are combined 112 with an appropriate matrix 140, dried or cured 114 until the slurry matrix 140 hardens,

Appl. No. 10/629,271
Response dated April 18, 2005
Reply to Office Action of December 16, 2004

and formed 116 into semiconductor wafers or integrated circuit die 150. The slurry matrix 140 may be dried or cured by heat, x-ray, high-energy radiation, microwave, ultraviolet, radiation or by any other known drying or curing method. The slurry matrix 140 may be formed into wafers, integrated circuit substrates or die either before or after the slurry matrix1-40 matrix 140 is dried or cured. The slurry matrix 140 may be formed into wafers or die by means of die cutting, stamping, cutting, etc. It should be noted that the matrix of glass-coated microspheres may be formed into wafers or integrated circuit substrates prior to the drying step, in which case the forming would be by means of knife coating (tape casting), mold casting, calendaring, etc. --